IN THE CLAIMS

1. (Currently amended) A method of testing signal characteristics of a communication formed from digital-network packets having a transport protocol, comprising:

receiving one or more reference-digital-network packets corresponding to a predetermined clip, the one or more reference-digital-network packets having the transport protocol;

extracting one or more reference-real-time protocol payloads from the one or more reference-digital-network packets as a reference clip;

selecting a reference clip algorithm;

generating one or more reference key values associated with the reference clip and with the reference clip algorithm;

receiving one or more current-digital-network packets having the transport protocol;

extracting one or more current payloads from the one or more current-digital-network packets as a current clip;

selecting a current clip algorithm;

generating one or more current key values associated with the current clip and with the current clip algorithm; and

comparing the one or more current key values with the one or more reference key values to determine an occurrence of a match between the current clip and the reference clip, and wherein the reference clip algorithm is the same as the current clip algorithm, the reference clip algorithm to select the one or more reference key values by mapping a number of bits beginning at respective one or more byte offsets in the one or more reference real-time protocol payloads, and the current clip algorithm to select the one or more current key values by the same mapping of the same number of bits beginning at respective one or more byte offsets in the one or more current real-time protocol payloads.

2. (Original) The method of Claim 1, wherein the predetermined clip includes an audio clip and the one or more current-digital-network packets include an audio signal.

3. (Original) The method of Claim 2, wherein the transport protocol includes a media transport protocol.

4. (Original) The method of Claim 2, wherein the transport protocol includes at least one CODEC format.

5. (Original) The method of Claim 4, wherein the at least one CODEC format is a selected one of a G.711 format, a G.723 format, and a G.729 format, an AMR format, a global system for mobile communications (GSM) format, a G.726 format, a G.722 format, a G.728 format, and video CODEC formats MPEG2 and MPEG4.

6. (Original) The method of Claim 1, wherein the predetermined clip includes a video clip and the one or more current-digital-network packets include a video signal.

7. (Original) The method of Claim 1, wherein the comparing comprises:

comparing the one or more current key values with the one or more reference key values associated with the reference clip; and

comparing the one or more current key values with one or more other reference key values associated with a plurality of reference clips.

8. (Original) The method of Claim 1, wherein the comparing comprises:

determining a number of matches between the one or more current key values and the one or more reference key values associated with the reference clip; and

deeming the current-digital-network packets to match the reference clip if the number of matches is greater than or equal to a predetermined threshold value.

9. (Canceled)

10. (Original) The method of Claim 1, wherein the reference clip algorithm, the current clip algorithm, the reference-digital-network packets, and the current-digital-network packets are associated with a CODEC format.

11. (Original) The method of Claim 1, further including:

recording at least one of the reference clip and the one or more reference key values associated with the reference clip; and

retrieving at least one of the recorded reference clip and at least one of the recorded one or more reference key values.

12. (Original) The method of Claim 1, further including:

identifying a CODEC format associated with the one or more current-digital-network packets; and

selecting the current clip algorithm in accordance with the identified CODEC format.

13. (Original) The method of Claim 1, further including:

selecting the reference clip algorithm and the current clip algorithm from among a plurality of clip algorithms in accordance with a CODEC format, the reference-digital-network packets and the current-digital-network packets associated with the CODEC format.

14. (Original) The method of Claim 13, wherein the CODEC format is selected from among a G.711 format, a G.723 format, and a G.729 format, an AMR format, a global system for mobile communications (GSM) format, a G.726 format, a G.722 format, a G.728 format, and video CODEC formats MPEG2 and MPEG4.

15 - 22. (Canceled)

23. (Currently amended) A computer program medium ~~having computer readable code thereon,~~encoded with computer executable instructions to test signal characteristics of a communication formed from digital-network packets having a transport protocol, including instructions for:

receiving one or more reference-digital-network packets corresponding to a predetermined clip, the one or more reference-digital-network packets having the transport protocol;

extracting one or more reference-real-time protocol payloads from the one or more reference-digital-network packets as a reference clip;

selecting a reference clip algorithm;

generating one or more reference key values associated with the reference clip and with the reference clip algorithm;

receiving one or more current-digital-network packets having the transport protocol;

extracting one or more current payloads from the one or more current-digital-network packets as a current clip;

selecting a current clip algorithm;

generating one or more current key values associated with the one or more current payloads and with the current clip algorithm; and

comparing the one or more current key values with the one or more reference key values to determine an occurrence of a match between the current clip and the reference clip, and wherein the reference clip algorithm is the same as the current clip algorithm, the reference clip algorithm to select the one or more reference key values by mapping a number of bits beginning at respective one or more byte offsets in the one or more reference real-time protocol payloads, and the current clip algorithm to select the one or more current key values by the same mapping of the same number of bits beginning at respective one or more byte offsets in the one or more current real-time protocol payloads.

24. (Original) The computer program medium of Claim 23, wherein the predetermined clip includes an audio clip and the one or more current-digital-network packets include an audio signal.

25. (Original) The computer program medium of Claim 24, wherein the transport protocol includes a media transport protocol.

26. (Original) The computer program medium of Claim 24, wherein the transport protocol includes at least one CODEC format.

27. (Original) The computer program medium of Claim 26, wherein the at least one CODEC format is a selected one of a G.711 format, a G.723 format, and a G.729 format, an AMR format, a global system for mobile communications (GSM) format, a G.726 format, a G.722 format, a G.728 format, and video CODEC formats MPEG2 and MPEG4.

28. (Original) The computer program medium of Claim 23, wherein the predetermined clip includes a video clip video and the one or more current-digital-network packets include a video signal.

29. (Original) The computer program medium of Claim 23, wherein the comparing includes instructions for:

comparing the one or more current key values with the one or more reference key values associated with the reference clip; and

comparing the one or more current key values with one or more other reference key values associated with a plurality of reference clips.

30. (Original) The computer program medium of Claim 23, wherein the comparing includes instructions for

determining a number of matches between the one or more current key values and the one or more reference key values associated with the reference clip; and

deeming the current-digital-network packets to match the reference clip if the number of matches is greater than or equal to a predetermined threshold value.

31. (Canceled)

32. (Original) The computer program medium of Claim 23, wherein the reference clip algorithm, the current clip algorithm, the reference-digital-network packets, and the current-digital-network packets are associated with a CODEC format.

33. (Original) The computer program medium of Claim 23, further including instructions for:

recording at least one of the reference clip and the one or more reference key values associated with the at least one reference clip; and

retrieving at least one of the recorded reference clip and at least one of the recorded reference key values.

34. (Original) The computer program medium of Claim 23, further including instructions for:

identifying a CODEC format associated with the one or more current-digital-network packets; and

selecting the current clip algorithm in accordance with the identified CODEC format.

35. (Original) The computer program medium of Claim 23, further including instructions for:

selecting the reference clip algorithm and the current clip algorithm from among a plurality of clip algorithms in accordance with a CODEC format, the reference-digital-

network packets and the current-digital-network packets associated with the CODEC format.

36. (Original) The computer program medium of Claim 23, wherein the CODEC format is selected from among a G.711 format, a G.723 format, and a G.729 format.

37 - 42. (Canceled)

43. (Currently Amended) A processor to test signal characteristics of a communication formed from digital-network packets having a transport protocol, comprising:

a digital-network-packet receiver to receive one or more reference-digital-network packets corresponding to a predetermined clip and to receive one or more current-digital-network packets;

a payload extractor coupled to the digital-network packet receiver to extract, as a reference clip, one or more reference payloads from the one or more reference-digital-network packets and to extract, as a current clip, one or more current payloads from the one or more current-digital-network packets;

a key generator having a reference clip algorithm to form one or more reference key values associated with the one or more reference payloads and a current algorithm to form one or more current key values associated with the one or more current payloads;

a reference-key-and-reference-clip database coupled to the payload extractor to store at least one of the reference clip and the one or more reference key values; and

a comparison processor coupled to the key generator and to the reference-key-and-reference-clip database, the comparison processor to compare the one or more reference key values with the one or more current key values to determine an occurrence of a match between the current clip and the reference clip, and wherein the reference clip algorithm is the same as the current clip algorithm, the reference clip algorithm to select the one or more reference key values by mapping a number of bits

beginning at respective one or more byte offsets in the one or more reference real-time protocol payloads, and the current clip algorithm to select the one or more current key values by the same mapping of the same number of bits beginning at respective one or more byte offsets in the one or more current real-time protocol payloads.

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44. (Original) The processor of Claim 43, wherein the predetermined clip includes an audio clip and the current-digital-network packets include an audio signal.

45. (Original) The processor of Claim 43, wherein the transport protocol includes a media transport protocol.

46. (Original) The processor of Claim 43, wherein the transport protocol includes at least one CODEC format.

47. (Original) The processor of Claim 46, wherein the at least one CODEC format is a selected one of a G.711 format, a G.723 format, and a G.729 format, an AMR format, a global system for mobile communications (GSM) format, a G.726 format, a G.722 format, a G.728 format, and video CODEC formats MPEG2 and MPEG4.

48. (Original) The processor of Claim 43, wherein the predetermined clip includes a video clip and the current-digital-network packets include a video signal.

49. (Original) The processor of Claim 43, wherein the comparison processor is adapted to compare the one or more current key values with the one or more reference key values associated with a plurality of reference clips.

50. (Original) The processor of Claim 43, wherein the comparison processor is adapted to determine a number of matches between the one or more current key values and the one or more reference key values associated with the reference clip, and to

deem the one or more current-digital-network packets to match the reference clip if the number of matches is greater than or equal to a predetermined threshold value.

51. (Canceled)

52. (Original) The processor of Claim 43, wherein the reference clip algorithm, the current clip algorithm, the reference-digital-network packets, and the current-digital-network packets are associated with a CODEC format.

53. (Original) The processor of Claim 43, further including at least one silence algorithm coupled to the payload extractor to detect if the current-digital-network packets contain silence.

54 - 56. (Canceled)